

## REGULAR RESEARCH PAPER

# Temporal associations between morningness/eveningness, problematic social media use, psychological distress and daytime sleepiness: Mediated roles of sleep quality and insomnia among young adults

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## Abstract

The extant literature has suggested relationships between an individual's chronotype (in relation to morningness/eveningness) and several outcomes, including addictive disorders, psychological distress and daytime sleepiness. Moreover, sleep quality has been proposed to be a mediator in the aforementioned relationships. Consequently, the aim of the present study was to investigate the complex relationship between morningness/eveningness, problematic social media use, psychological distress and daytime sleepiness, with the potential mediators of sleep quality and insomnia. All participants ( $N = 1,791$  [30.1% males]; mean age = 27.2 years,  $SD = 10.1$ ) completed a battery of psychometric scales, including a reduced version of the Morningness-Eveningness Questionnaire (at baseline), the Pittsburgh Sleep Quality Index and Insomnia Severity Index (1 month after baseline assessment), the Bergen Social Media Addiction Scale, the Hospital Anxiety and Depression Scale, and the Epworth Sleepiness Scale (2 months after baseline assessment). The impacts of morningness-eveningness on problematic social media use, anxiety, depression and daytime sleepiness were found in the mediation models. Furthermore, the mediated effects of insomnia and sleep quality were observed. The present study's results emphasize the importance of promoting healthy sleep habits and sleep hygiene behaviours, and that of early detection of sleep problems among individuals who have the eveningness chronotype, because this would significantly improve their health outcomes.

## KEYWORDS

behavioural addiction, chronotype, daytime sleepiness, eveningness, morningness, sleep, social media addiction